

The claims defining the invention are as follows:

1. A mining apparatus including:
 - a conveyor to extend along a mine road to convey mined material there along from a forward end to a rearward end of the conveyor;
 - an auger mining machine positioned adjacent the conveyor to mine material by forming tunnels extending generally normal to the conveyor and to deliver the mined material to said conveyor at a position spaced from said forward end towards said rearward end, and wherein;
 - said conveyor is adapted to receive at said forward end material mined in forming said road.
2. The mining apparatus of claim 1 further including a hopper onto which material mined on forming said road is delivered, said hopper being positioned at said forward end so as to deliver the mined material to said conveyor.
3. The mining apparatus of claim 1 wherein said conveyor includes:
 - a pan upon which the mined material rests to be conveyed towards said rearward end by a chain assembly; and
 - said auger mining machine includes:
 - an auger base providing a cradle to support a plurality of auger string segments;
 - a motor and drive assembly mounted on said auger base to engage and drive an auger string to form the tunnels, the string being formed from a plurality of said string segments;
 - a boom assembly to transport said segments and being mounted on the auger base;
 - said boom assembly including a boom member movable in a direction generally parallel to said conveyor between an extended position and a retracted position to transport said segments between said cradle and said assembly so that the auger strings can be assembled and disassembled.
4. The mining apparatus of claim 2 wherein said pan passes beneath said auger mining machine so that mined material provided by the auger mining machine falls to said pan.
5. The mining apparatus of claim 3 said auger base includes:
 - a first base and a second base portion, with said cradle being provided by said second base portion; and

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said motor and drive assembly is a first drill head, which first drill head is mounted on said first base portion;

said auger mining machine includes a second motor and drive assembly being a second drill head, which second drill head being mounted on said second base portion;
5 and wherein

said boom assembly transports the segments between said cradle and drill heads so that tunnels may be formed simultaneously or singularly, with the material mined thereby falling to said pan.

6. A method of mining including the steps of:

10 forming a road in a coal seam by advancing a first mining machine into the coal seam to mine material therefrom;

delivering the mined material to a forward end of the conveyor which extends along said road;

15 conveying the material via said conveyor along said road to a rearward end of the conveyor;

advancing an auger mining machine into the seam from said road in a direction generally normal to said road so as to provide further mined material; and

delivering the further mined material to said conveyor to be moved to said rearward end thereby.

20 7. The method of claim 6 wherein said first mining machine is a continuous miner.

8. The method of claim 7 wherein material mined by said continuous miner is delivered to said conveyor via a shuttle car.

9. The method of claim 8 wherein the shuttle car delivers the mined material to a hopper that delivers the coal to said forward end.

25 10. The method of claim 6 wherein said auger mining machine forms two tunnels in the seam simultaneously by the operation of two drilling heads and an auger string associated with each drilling head.

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11. The method of claim 5 wherein the auger is advanced into said seam by adding auger segments to an auger string, said auger segments being removed from an adjacent auger string that is being retracted.

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